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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,639	11/21/2003	Michael J. Faulks	18,098	3447

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KIMBERLY-CLARK WORLDWIDE, INC.
Catherine E. Wolf
401 NORTH LAKE STREET
NEENAH, WI 54956

EXAMINER	
HAND, MELANIE JO	
ART UNIT	**PAPER NUMBER**
3761	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/719,639	FAULKS ET AL.	
	Examiner	Art Unit	
	MELANIE J. HAND	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,21-30 and 32-36* is/are pending in the application.

4a) Of the above claim(s) *1-9* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-18,21-30,32-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed April 23, 2008 have been fully considered but they are not persuasive.

2. With respect to arguments regarding claims 10-18, 21-30 and 32-36: Applicant argues that examiner's interpretation of the word match" in the rejection of claim 1 with regard to Hwang's teachings is incorrect and that the materials match in the sense that they are miscible in the molten state, rather than identical. This is not persuasive because identical materials are necessarily miscible in the molten state, therefore whatever interpretation of match was used by examiner or applicant arrives at the same result, i.e. Hwang renders the claimed invention obvious. Applicant further argues that examiner's statement regarding the prior art of Hwang that “the rattle reducing additive phase separates to form a separate layer which substantially completely coats said target region” is not found anywhere in the Hwang patent and no law of chemistry was cited. First, a first ingredient that is ONLY partially soluble in a second ingredient means that when the mixture cools, the two ingredients phase separate. That is the very nature of partial solubility. The two ingredients are only partially soluble at higher temperatures and even then they are not completely miscible or one completely soluble in the other. Second, applicant is referred to Col. 4, lines 51-56, where support for this teaching of Hwang cited in the rejection of claim 1 is found. As to applicant’s argument that a separate layer of rattle-reducing additive is not formed, again the rattle reducing additive (also referred to by Hwang as “the aliphatic compound”, see Col. 4, lines 45-47) is only partially miscible and phase-separates from the thermoplastic. Since the two compositions components phase-separate yet form a film

nonetheless, the rattle reducing additive necessarily has bulk and defines a surface, i.e. it forms a layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 10-18, 21-30, 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al (U.S. Patent No. 4,902,553).

With respect to **claim 10:** Hwang teaches a reduced-noise backsheet comprising: a substrate layer in the form of a polymeric matrix which defines a first surface having a surface area and a target region defined by the periphery of the surface, and a noise-reducing layer in the form of a rattle-reducing additive that is partially soluble in the polymeric matrix and phase-separates at room temperature from the polymeric matrix to form a separate layer which substantially

completely coats said target region. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive “matches” the polymer of the polymeric matrix. The term “match” is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, while Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about three grams per square meter, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise reducing layer has a basis weight of at least about three grams per square meter with a reasonable expectation of success to yield a rattle-reducing material. (Col. 4, lines 8-56)

With respect to **claim 11:** The target region is 100% of the surface area of the first surface because the target region contains the rattle-reduicng layer which is formed by mixing the polymeric matrix material and additive at an elevated temperature and allowing the mixture to cool, thus forming the noise-reducing layer. Therefore any first surface of the substrate will have a target region containing the additive layer that is 100% of the first surface area. This percentage falls within the claimed range of at least about 75% of said surface area of said first surface.

With respect to **claim 12:** Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about four grams per square meter. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive “matches” the polymer of the polymeric matrix. The term “match” is interpreted herein as meaning that the two compounds

are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer has a basis weight of at least about four grams per square meter with a reasonable expectation of success to yield a rattle-reducing material.

With respect to **claim 13:** Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Hwang therefore does not teach any of the items set forth in claim 13. However polyisobutlyene is a type, or isomer, of polybutylene, having substantially identical chemical properties to polybutylene, and Hwang teaches "other modified polyolefins" which would include polyisobutylene. Therefore it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer consists essentially of polyisobutylene with a reasonable expectation of success to create a rattle-reducing material.

With respect to **claim 14:**The noise-reducing layer consists essentially of polybutylene. Hwang does not teach that the noise-reducing layer consists essentially of polybutylene adhesive, however Hwang teaches that it is desirable that the noise-reducing layer match the polymer matrix and teaches polybutylene as the polymer for the matrix, therefore it would be obvious to

one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer consists essentially of polybutylene adhesive with a reasonable expectation of success.

With respect to **claim 15:** The substrate layer of Hwang, the polymer matrix material, comprises a thermoplastic polymeric film.

With respect to **claim 16:** The substrate layer material is cooled below its crystallinization temperature to form the separate instant substrate and noise-reducing layers, thus the crystallinized substrate layer is necessarily non-elastomeric.

With respect to **claim 17:** The reduced-noise backsheet further comprises a nonwoven layer as part of a sanitary napkin adhered to said substrate layer. (see Example 3)

With respect to **claim 18:** The substrate layer comprises at least one of' polyethylene and polypropylene in the form of a mixture of the two polymers.

With respect to **claim 21:** Hwang teaches a disposable absorbent article comprising: a topsheet (body-side liner), and a garment-side outer cover, said outer cover comprising: a liquid-impermeable substrate layer comprised of a thermoplastic, polymeric material in the form of a polymer matrix and which defines a first surface having a surface area and a target area, and a noise-reducing layer in the form of a layer of rattle-reducing additive which substantially completely coats said target region. The absorbent article of Hwang also comprises an absorbent assembly disposed between said body-side liner and said garment-side outer cover. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive “matches” the

polymer of the polymeric matrix. The term “match” is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, while Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about three grams per square meter, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise reducing layer has a basis weight of at least about three grams per square meter with a reasonable expectation of success to yield a rattle-reducing material.

With respect to **claim 22:** The target region of Hwang has an area which is at least about 50% of said surface area of said first surface. The target region is 100% of the surface area of the first surface because the target region contains the rattle-reducing layer which is formed by mixing the polymeric matrix material and additive at an elevated temperature and allowing the mixture to cool, thus forming the noise-reducing layer. Therefore any first surface of the substrate will have a target region containing the additive layer that is 100% of the first surface area. This percentage falls within the claimed range of at least about 50% of said surface area of said first surface.

With respect to **claim 23:** The target region taught by Hwang is 100% of the surface area of the first surface because the target region contains the rattle-reduicng layer which is formed by mixing the polymeric matrix material and additive at an elevated temperature and allowing the mixture to cool, thus forming the noise-reducing layer. Therefore any first surface of the substrate will have a target region containing the additive layer that is 100% of the first surface

area. This percentage falls within the claimed range of at least about 75% of said surface area of said first surface.

With respect to **claim 24:** Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about four grams per square meter. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer has a basis weight of at least about four grams per square meter with a reasonable expectation of success to yield a rattle-reducing material.

With respect to **claim 25:** Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle reducing additive is also polybutylene. Hwang therefore does not teach any of the items set forth in claim 13. However polyisobutlyene is a type, or isomer, of polybutylene, having substantially identical chemical properties to polybutylene, and Hwang teaches "other modified polyolefins" which would include polyisobutylene. Therefore, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer consists

essentially of polyisobutylene with a reasonable expectation of success to create a rattle-reducing material.

With respect to **claim 26:** The noise-reducing layer of Hwang consists essentially of polybutylene. Hwang does not teach that the noise-reducing layer consists essentially of polybutylene adhesive, however Hwang teaches that it is desirable that the noise-reducing layer match the polymer matrix and teaches polybutylene as the polymer for the matrix, therefore it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer consists essentially of polybutylene adhesive with a reasonable expectation of success to maintain the rattle-reducin property of the film.

With respect to **claim 27:** The substrate layer of Hwang, the polymer matrix material, comprises a thermoplastic polymeric film.

With respect to **claim 28:** The substrate layer material is cooled below its crystallinization temperature to form the separate instant substrate and noise-reducing layers, thus the crystallinized substrate layer is necessarily non-elastomeric.

With respect to **claim 29:** The reduced-noise backsheet further comprises a nonwoven layer as part of a sanitary napkin adhered to said substrate layer. (see Example 3)

With respect to **claim 30:** The substrate layer comprises at least one of' polyethylene and polypropylene in the form of a mixture of the two polymers.

With respect to **claim 32:** Hwang teaches a disposable absorbent article comprising: a topsheet (body-side liner), and a garment-side outer cover, said outer cover comprising: a liquid-impermeable substrate layer comprised of a thermoplastic, polymeric material in the form of a polymer matrix and which defines a first surface having a surface area, and a noise-reducing layer in the form of a layer of rattle-reducing additive which substantially completely coats a target region of said first surface. The absorbent article of Hwang also comprises an absorbent assembly disposed between said body-side liner and said garment-side outer cover. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, while Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about three grams per square meter, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the article has a Noise Level of less than 30.0 dB at 2 kHz and less than 28.0 dB at 4 kHz with a reasonable expectation of success to yield a rattle-reducing material.

With respect to **claim 33:** The target region of Hwang has an area which is at least about 50% of said surface area of said first surface. The target region is 100% of the surface area of the first surface because the target region contains the rattle-reducing layer which is formed by mixing the polymeric matrix material and additive at an elevated temperature and allowing the mixture to cool, thus forming the noise-reducing layer. Therefore any first surface of the substrate will have a target region containing the additive layer that is 100% of the first surface

area. This percentage falls within the claimed range of at least about 50% of said surface area of said first surface. Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Applicant discloses polyisobutylene as the material for the noise-reducing coating or layer, wherein polyisobutylene is an isomer of polybutylene and thus has substantially identical chemical properties. Therefore, while Hwang does not explicitly teach that the reducing layer of polybutylene has a basis weight of at least about three grams per square meter, it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise reducing layer has a basis weight of at least about three grams per square meter with a reasonable expectation of success to yield a rattle-reducing material.

With respect to **claim 34:** Hwang teaches that the aliphatic compound, i.e. the rattle-reducing additive "matches" the polymer of the polymeric matrix. The term "match" is interpreted herein as meaning that the two compounds are identical. Hwang teaches polybutylene as the polymer thus the rattle-reducing additive is also polybutylene. Hwang therefore does not teach any of the items set forth in claim 13. However polyisobutlyene is a type, or isomer, of polybutylene, having substantially identical chemical properties to polybutylene, and Hwang teaches "other modified polyolefins" which would include polyisobutylene. Therefore it would be obvious to one of ordinary skill in the art to modify the article of Hwang such that the noise-reducing layer consists essentially of polyisobutylene with a reasonable expectation of success to create a rattle-reducing material.

With respect to **claim 35:** The thermoplastic polymeric substrate layer material of Hwang is cooled below its crystallinization temperature to form the separate instant substrate and noise-reducing layers, thus the crystallinized substrate layer is necessarily non-elastomeric.

With respect to **claim 36:** The reduced-noise backsheet of Hwang further comprises a nonwoven layer as part of a sanitary napkin adhered to said substrate layer. (see Example 3)

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie J Hand/
Examiner, Art Unit 3761

/Tatyana Zalukaeva/

Supervisory Patent Examiner, Art Unit 3761